ABSTRACT

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An apparatus and method is provided for converting digital images for use in an imaging system. apparatus includes a data memory which stores digital data representing an image having a circular or spherical field of view such as an image captured by a fish-eye lens, a control input for receiving a signal for selecting a portion of the image, and a converter responsive to the control input for converting digital data corresponding to the selected portion into digital data representing a planar image for subsequent display. Various methods include the steps of storing digital data representing an image having a circular or spherical field of view, selecting a portion of the image, and converting the stored digital data corresponding to the selected portion into digital data representing a planar image for subsequent display. In various embodiments, the data converter and data conversion step may use an orthogonal set of transformation algorithms.